A SYSTEMIC REVIEW OF ARTICLES ON PRATISHYAYA

(ALLERGIC RHINITIS)

1 Ayanaraj.P*, Ashwini.M.J**

1Assistant Professor, Dept. of Shalakya Tantra, Adichunchanagiri Ayurvedic Medical College Hospital & Research Centre, Bangalore, Karnataka, India

2Prof and Head, Department of Shalakya Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka, India
drashwinidhanpal@gmail.com

Corresponding Author's Email: mailtoayana@gmail.com

ABSTRACT

Objective: To review the articles published in Ayurveda on Allergic Rhinitis published between the years 2009 to 2018.

Data Sources: The electronic databases; Bibliographies of located articles; Online Journals in the field available at various search portals.

Selection of Articles: The articles that are available in different search portals published in between the year 2009 to 2018 have been selected for the analysis.

Results: Out of the 30 articles analyzed 2 were case studies, 16 were clinical trials, 11 were review article and one article on a pilot study. Allergic rhinitis is correlated to Vataja Pratishyaya in 23 articles. Out of the 16 clinical trials, 8 studies have been done on an average sample size of 20-40. In the available 16 articles on clinical trials, 8 trials have included Nasya as an intervention. 11 formulations of Nasya have been studied, in that 9 were Navana Nasya. Kshavathu (Sneezing), Nasavarodha (Nasal Blockage), Nasa
Srava (Rhinorrhea) were taken as the subjective parameter in all the 16 Clinical studies. AEC is taken as objective parameter in 6 studies.

CONCLUSIONS:

The publications reveal the available evidence-based information regarding utility, efficacy, and safety of wide spectrum of ayurvedic formulations in the treatment of Allergic Rhinitis. The review also illustrates common parameters used for the assessment of clinical trial. Nasya has been selected as the intervention in majority of the research studies in the reviewed articles. Thus, the review provides comprehension regarding the need and scope of other treatment modalities like Snehapana, Swedana, Dhoomapana, etc. as an intervention in clinical studies on Vataja Pratishyaya (Allergic Rhinitis).

KEY WORDS: Vataja Pratishyaya, Allergic Rhinitis, Articles

INTRODUCTION

Allergic rhinitis has become one of the most troublesome health issues in recent years with a significant effect on quality of life, sleep, and work performance. The metropolitans are affected much as they are exposed to air pollutants and climatic changes. It represents a challenge to the public health in both industrialized and developing countries because of its chronic nature and economic impact.

The disease Vataja Pratishyaya explained in ayurvedic treatises is analogous to Allergic rhinitis as explained in modern medical science as most of the aspects like etiology-pathogenesis, clinical features and complications of allergic rhinitis are like that of vataja pratishyaya.

Allergic rhinitis is one of the most common chronic disorders, with reported prevalence ranging from 3% to 19% in various countries. Evidence suggests that seasonal allergic rhinitis is found in approximately 10% of the general population and perennial allergic rhinitis in 10% to 20%.¹ and the prevalence of the disorder is increasing.

In allied science the treatment for allergic rhinitis aims mainly at symptomatic relief and it is found to be deficient due to high recurrence rate and adverse effects. Ayurveda—the science of longevity suggests many effective treatments which can provide the optimum cure and prevent further recurrence by enhancing the body immunity. During
the recent few decades, constant efforts have been made to apply the wisdom of this science for the effective management especially in chronic respiratory disorders and it has come out with beneficial claims. Many articles have been published pertaining to the understanding and management of allergic rhinitis in Ayurveda.

The search and systemic review of such relevant articles accomplishes the better understanding of the evidence available. The detailed analysis of the recent studies and developments on the treatment of pratishyaya helps to understand the limitations and suggests the areas of research that are seldom explored. Thus, the present article is an attempt to consolidate and critically analyze the article published on Pratisyaya (Allergic Rhinitis) between the year 2008 and 2019 available at various search portals.

Data Sources: The electronic databases; Bibliographies of located articles; Online Journals in the field available at various search portals.

Selection of Articles: The articles that are available in different search portals published in between the year 2009 to 2018 have been selected for the analysis.

**OBSERVATION**

**OBSERVATION ON THE CORRELATION OF ALLERGIC RHINITIS**

Allergic rhinitis is correlated to Vataja Pratishyaya in 23 articles out of the 30 articles. In 6 articles it is correlated to Pratishyaya and in one article it is considered as anurjatajanita pratishyaya.
OBSERVATION ON TYPE OF ARTICLE

Out of the 30 articles analyzed 2 were case studies, 16 were clinical trials, 11 were review article and one article on a pilot study.

OBSERVATION ON THE SAMPLE SIZE OF CLINICAL TRIALS

<table>
<thead>
<tr>
<th>SAMPLE SIZE</th>
<th>NUMBER OF STUDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤20</td>
<td>3</td>
</tr>
<tr>
<td>&gt;21≤40</td>
<td>8</td>
</tr>
<tr>
<td>&gt;41≤60</td>
<td>2</td>
</tr>
<tr>
<td>&gt;60≤80</td>
<td>1</td>
</tr>
<tr>
<td>&gt;80≤100</td>
<td>1</td>
</tr>
<tr>
<td>&gt;100</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1 Sample Size Of Different Studies
OBSERVATION ON INTERVENTIONS OF CLINICAL TRIAL

Out of the 16 clinical trials 2 were having shamanoushadhi as an intervention, 2 were on shodhana (Nasya), 3 were having shodhana and shaman combined as an intervention, 4 studies have done on comparison between two different shamanoushadhies, 3 were on comparison between two different formulations of shodhana(Nasya) and 2 studies compared the efficacy of a shamaoushadhi with a standard allopathic medication.

LIST OF NASYA AUSHADHI AND SHAMANA AUSHADHI IN CLINICAL TRIALS

<table>
<thead>
<tr>
<th>Sl No</th>
<th>NASYA AUSHADHI</th>
<th>SHAMANA AUSHADHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>SHUNTYADI TAILA</td>
<td>CHITRAKA HAREETAKI</td>
</tr>
<tr>
<td>2)</td>
<td>TRIPHALADI TAILA</td>
<td>HARIDRA KHANDA</td>
</tr>
<tr>
<td>3)</td>
<td>ANUTAILA</td>
<td>SHUDHA HARIDRA</td>
</tr>
<tr>
<td>4)</td>
<td>KATPHALA CHOORNA</td>
<td>GUDA ARDRAKA</td>
</tr>
</tbody>
</table>
Table 2 List of NasyaAushadhi and ShamanaAushadhi in Clinical Trials

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>SHADBINDU GHrita</td>
</tr>
<tr>
<td>6</td>
<td>SHIGRU TAILA</td>
</tr>
<tr>
<td>7</td>
<td>VIDANGADYA TAILA</td>
</tr>
<tr>
<td>8</td>
<td>PATADI TAILA</td>
</tr>
<tr>
<td>9</td>
<td>KUSHTADI TAILA</td>
</tr>
<tr>
<td>10</td>
<td>GOGHRITA</td>
</tr>
<tr>
<td>11</td>
<td>CHATURJATAKA TAILA</td>
</tr>
</tbody>
</table>

**OBSERVATION ON TYPE OF NASYA**

Figure 4 Type Of Nasya

Out of the 16 articles on clinical trials, 8 trials (including observational and comparative clinical studies) have included nasya as an intervention. 11 Nasyayogas have been studied, in that 9 were navanaasya, 1 was avapeedanasya and 1 was shodhananasya.
OBSERVATION ON THE PARAMETERS OF ASSESSMENT

**Figure 5 Subjective Parameter**
Kshavathu(Sneezing), Nasavarodha (Nasal Blockage), Nasa Srava(Rhinorrhoea) were taken as the subjective parameter in all the 16 studies. Kandu (Itching in nose) have been taken as a parameter in 14 studies, Shirashoola (Head ache) in 7 studies, Ghrananasha (Loss of smell) in 2 studies, Kasa in 2 studies, Asyavairasya in 2 studies and Gala talu Shushkata in 1 study

**Figure 6 Objective Parameter**
AEC is taken as objective parameter in 6 studies, nasal smear in 2 studies, TLC in 2 studies, neutrophil in one study, ESR IN 3 Studies, DLC in 1 study, CBC in 1 study,
Allergic shiners in 1 study, Pharynx Congestion in 1 study and redness of conjunctiva in 1 study.

**OBSERVATION ON THE RESULTS**

**Results of Observational studies on ShamanaAushadhi**

The two observational studies on Shamanaaushadhishows significant result on all the parameters.

**Results of Observational studies on Shodhana(Nasya)**

The analysis of the result of two studies conducted on the effect ofshodhana karma in the form of Nasya shows statistically significant improvement on the chief complaints and totals nasal symptom score. Laboratory immunological parameters which included Total Leucocyte Count, Absolute Eosinophil Count, Neutrophils and Lymphocytes showed improvement with high statistical significance (< 0.001) in one study.

**Results of Observational studies on combined effect of ShamanaAushadhi and Shodhana (Nasya)**

The three observational studies on the combined effect of Shamana and Shodhana(Nasya) shows significant result on all the parameters.

**Results of Comparative studies between ShamanaAushadhi and Shodhana (Nasya)**

Analysis of the results of four studies that compared the efficacy of Shamana and ShodhanaAushadhi shows that both the interventions were statistically equally significant. Nasya is found to be giving better result in objective parameters, Sneezing, Nasal obstruction, Nasal discharge, and Turbinate Hypertrophy.

**Results of Comparative studies between two different formulations of Shodhana(Nasya)**

<table>
<thead>
<tr>
<th>SL.NO</th>
<th>INTERVENTION</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Group A-</strong> ShuntyaditailaNasya – 7 days.</td>
<td>Group A&gt; Group B</td>
</tr>
<tr>
<td></td>
<td><strong>Group B-</strong> Triphaladi taila Nasya – 7</td>
<td></td>
</tr>
</tbody>
</table>
Group A - Shunthi tail Nasya for 14 days, followed by internal drug SudhaHaridra 2 gms TDS. for 21 days

Group B - PradhamanaNasya with Katphalchurna till samayakashuddhilakshanaobtained, followed by internal drug ShuddhaHaridra 2 gms TDS for 21 days

Marked improvement was found in 78.94% patients of group A, 91.30% of group B

Group A - ShigruTailaNasya Karma for 7 days. Dose: 6 Bindu

Group B - VidangadyaTaila for 7 days. Dose: 6 Bindu

The percentage success rate of Group is A 57.5% & Group-B is 56.8%. There is no significant difference among the results of the treatment of Group-A and Group-B by paired proportion test of significance for i.e. p< 0.001.

Patients of group A treated with ShigruTailaNasya Karma have shown better results clinically compared to group B who were treated with VidangadyaTaila.

Figure 7 Results of Comparative studies between two different formulations of Shodhana (Nasya)

Results of Comparative studies between ShamanaAushadhi / Shodhana and Standard allopathic Drug

The two studies that compared the effect of Ayurvedic treatment (one study on Shamanaaushadhi and the other on Nasya) with standard allopathic drug reveals that recurrence of the disease was less in group treated with ayurvedic treatment.
RESULTS:
Out of the 30 articles analyzed 2 were case studies, 16 were clinical trials, 11 were review article and one article on a pilot study. Allergic rhinitis is correlated to Vataja Pratishyaya in 23 articles. Out of the 16 clinical trials, 8 studies have been done on an average sample size of 20-40. In the available 16 articles on clinical trials, 8 trials have included Nasya as an intervention. 11 formulations of Nasya have been studied, in that 9 were Navana Nasya. Kshavathu (Sneezing), Nasavarodha (Nasal Blockage), Nasa Srava (Rhinorrhoea) were taken as the subjective parameter in all the 16 Clinical studies. AEC is taken as objective parameter in 6 studies.

CONCLUSION:

The review of ayurvedic articles related to Vataja Pratishyaya (Allergic Rhinitis) aids to the fundamental understanding, interpretation, and analysis of classical literature in Ayurveda. The review of also provides a comprehensive insight to the common causative factors, pathophysiology, clinical manifestations, and the management of allergic Rhinitis.

The publications reveal the available evidence-based information regarding utility, efficacy, and safety of wide spectrum of ayurvedic formulations in the treatment of Allergic Rhinitis. The review also illustrates common parameters used for the assessment of clinical trial. It also highlights the need of conducting clinical trials with large sample size. Nasya has been selected as the intervention in majority of the research studies in the reviewed articles. Thus, the review provides comprehension regarding the need and scope of other treatment modalities like Snehapana, Swedana, Dhoomapana, e.t.c as an intervention in clinical studies on Vataja Pratishyaya (Allergic Rhinitis).

REFERENCES:


3) Kuldeep Choudhary, Tapashi Borah, Binod Kumar Bharali and Monika Guleria, Managing Allergic Rhinitis in Children Through Ayurvedic Herbal Medicines, International Journal of Pharmaceutical Sciences and Research


6) Dr. Pundareekaksha Rao, Assessment of clinical features present in the patients of vataja pratishyaya: randomised observational study, World journal of pharmaceutical and medical research, 2017, 3(1), 242-246.

7) Marco Lebbing, Ayurvedic treatment of allergic rhinitis, European Academy of Ayurveda Health and Treatment Center, 2013, D-63633 Birstein

8) Hiremath V.R, Srinivasaprasad B, Role of Shuntyadi Taila And Triphaladi Taila Nasya In Vataja Pratishyaya (Allergic Rhinitis), Journal of Indian System of Medicine, Vol.2-Number 3, July-September 2014


11) Shiva Kumar, Parikshit Debnath, Subhadip Banerjee, Arun Raj GR, Prasanna N Rao, Clinical investigations on the ayurvedic Management of allergic rhinitis (vataja Pratishyaya) by pratimarshanasyasNasya Nasal drug delivery system, Exploratory Animal and Medical Research


15) Dr Shashank Reddy, Dr Santosh L Yadahalli, Importance of nasya in the management of pratishyaya w.s.r to allergic rhinitis, Ayurpub.com, May-Jun 2018 Vol III, Issue 3

16) Verma Swati, Role of katphaladikwatha and anutailanasyain the Management of vataja pratishyaya (Allergic rhinitis), International Ayurvedic Medical Journal, Volume 1; Issue 3; May – June 2013


18) Vasant Patil1, Chennamma Uppin, Sanjay Gupta, Veerayya Hiremath4, S.V. Rayanagoudar, D.B. Kendadamath, Clinical study to compare the efficacy of nasya karma with shigrutaila and vidangadyataila in vataja pratishyaya (allergic rhinitis), AYUSHDHARA, July - August 2016, Vol 3, Issue 4


20) Lahankar MA, Magar Sunita V, Dwivedi Amar P, Kanoja Prashanth, Management of Vataja Pratishyaya with Kushtaditailanasya and Nidigdikadikwatha w.s.r to Allergic Rhinitis, Unique journal of Ayurvedic and herbal medicines, February-March 2017, 1(3)


24) Dr. Mangalagowri V Rao, Prof. Rajesh Kumar, Prof. S K Tiwari, Role of pratimarshanasya, yogic practices and diet in pratishyaya (allergic rhinitis), European journal of pharmaceutical and medical research, 2015, 2(6), 267-275.


31) Syuji Yonekura, Yoshitaka Okomotoa, Daiju Sakurai, Toshioki, Sakura, Tomohisa, Complementary and alternative medicine for allergic rhinitis in Japan, Allergology International, 66 (2017), 425-431